

# Two African species of *Eretmocer*s Haldeman (Hymenoptera: Aphelinidae)

by

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Introduced by D. P. Annecke

In this paper the specific characters of *Eretmocer*s *diversiciliatus* Silvestri are clarified and *E. nairobi* spec. nov. from Kenya is described.

*Eretmocer*s *diversiciliatus* Silv. was described from Lagos, Nigeria, in 1914. Since then numerous Mediterranean and African specimens of *Eretmocer*s have been erroneously determined as *diversiciliatus*. The following description of this species will, it is hoped, prevent further misidentifications.

*Eretmocer*s *diversiciliatus* Silv. figs 1–5

Silvestri, F., 1914, *Boll. Lab. Zool. Portici* 9:366–367.

## FEMALE

*Colour.* Uncleared Hoyer-mounted type material all uniformly pale yellow. Muscle and other internal remnants darker, posterior tip of scutellum brownish.

*Body length.* 680 $\mu$ , width at widest point of thorax, 265 $\mu$ .

*Antenna.* (fig. 1) Club 7 times longer than wide, margins subparallel, tip with inner angle acute, outer rounded, second funicle joint square, as wide as club base, first triangular.

*Thorax.* Mesoscutum with 2 setae and subhexagonal sculpture, scutellum with 4 setae and elongate sculpture, mesoscutum 1.5 times length of scutellum.

*Legs.* As in fig. 2.

*Wings.* Forewing (fig. 3) 3 times longer than wide, retinaculum  $\frac{3}{5}$  wing length, stigmal equal to marginal, submarginal 2.5 times stigmal, longest fringe  $\frac{1}{3}$  wing width, bare area posterior to marginal with 7 cilia. Hindwing about 7 times longer than wide, fringe somewhat longer than maximal width.

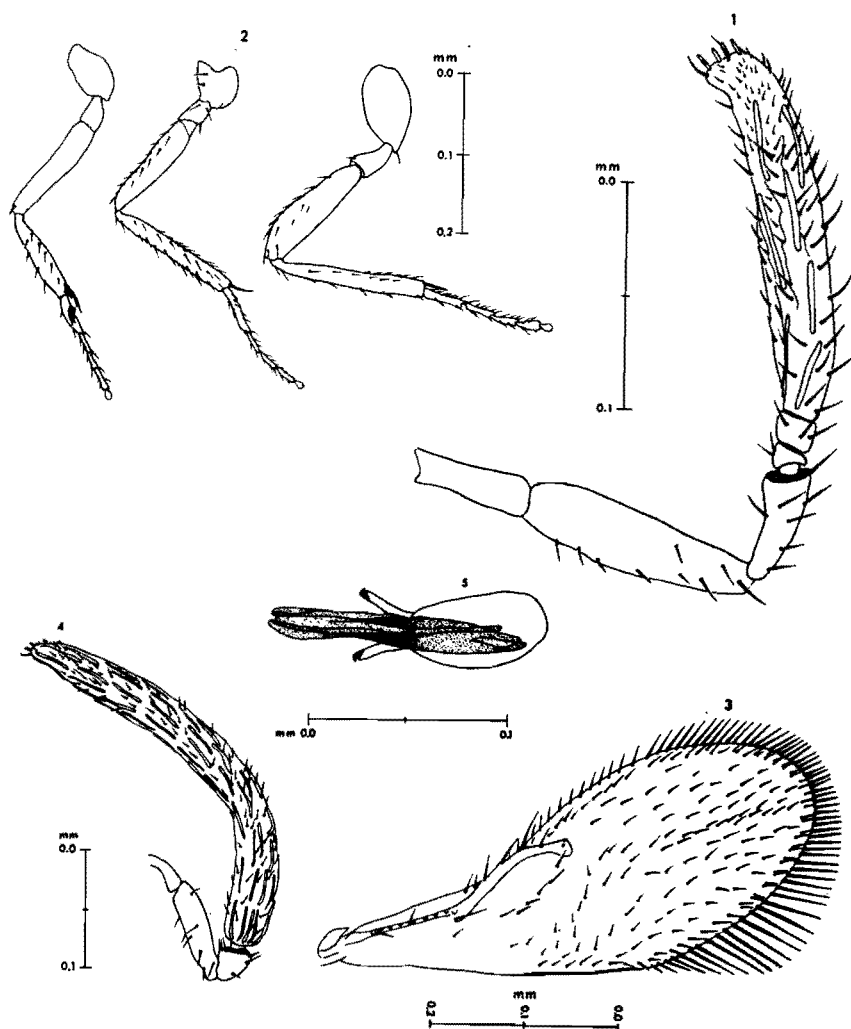
*Abdomen.* Ovipositor  $\frac{1}{3}$ – $\frac{1}{2}$  longer than antennal club.

*Measurements in microns.* (In the case of paired organs, readings are averages of both.) Antennal radicle 53, scape 110, pedicel 58, funicle 1 (long axis) 8, funicle 2 15.4, club 184 long, 26 wide; mesoscutum 104 long, 173 wide; scutellum 77 long, 154 wide. Leg 1 tarsus I 54, II 27, III 27, IV 27; leg 2 tarsus I 58, II 24, III 29, IV 31; leg 3 tarsus I 56, II 38, III 38, IV 31. Forewing 640 long, 211 wide, stigmal 67, marginal 66, submarginal 178, retinaculum 360, widest fringe 72; hindwing 477 long, 64 wide, longest fringe 75, ovipositor 210 long.

## MALE

*Colour* (of Hoyer-mounted type). Pale yellow, anterior margin of mesonotum, anterior and posterior margins of scutellum, last tarsal segments, tip of aedeagus and wing nerves dark yellow or brown. Rest of features as in female except for those characteristic of males in the genus *Eretmocerus*.

*Measurements in microns*. Antennal club (fig. 4) 446 long, 35 wide, aedeagus (fig. 5) middle organ 131, volsellar arms 33.



Figs 1-5. *Eretmocerus diversiciliatus* Silv. 1. Antenna (♀). 2. Legs. 3. Forewing. 4. Antenna (♂). 5. Aedeagus.

Described from two males and two females on two slides prepared by Silvestri in 1914. Each slide contains one dissected and one complete specimen. The latter were designated as paratype and holotype respectively. The slides are deposited in the collection of the University of Naples in Portici.

This species is readily recognizable through its single pair of scutellar setae, small number of cilia on the wing, and antennal shape in the female.

Type locality: Lagos, Nigeria.

During March, 1969, while staying in Nairobi, Kenya, the author collected numerous specimens of *Aleurocanthus hansfordi* Corbett\* from which issued, among other material, a new species of *Eretmocerus* Haldeman. Several slide-mounted specimens of the same species, which is described hereunder as *E. nairobii* spec. nov., were collected in Nairobi from the same host by J. M. McGough and are deposited in the U.S. National Museum.

***Eretmocerus nairobii* spec. nov., figs 6–10**

**FEMALE**

*Colour* (of dead, point-mounted insect). Body dark yellow, ocelli crimson, eyes dark red; posterior third of scutellum brown, posterior tip darkest; posterior end of abdomen darker than rest. Forewing veins, retinaculum and area anterior to it brown; hindwing veins pale brown; rest of wings colourless. Antennae and ventral aspect of body paler than dorsum.

Cleared and slide-mounted specimens are pale yellow or transparent; however, a brown hue is visible at the posterior end of the scutellum and brown colour of wings is retained.

*Antenna*. (fig. 6) Club 3.5–4.0 times longer than wide, widens gradually towards distal end, one margin forms straight outgoing line at distal  $\frac{1}{8}$ th, other margin rounded off at distal end; funicle segments adhere closely to each other, first triangular, second trapezoidal with distal margin as wide as club base.

*Thorax*. Mesoscutum and scutellum both with subhexagonal and longitudinal sculpture, each bears 4 setae, mesoscutum somewhat less than  $1\frac{1}{2}$  times longer than scutellum.

*Legs*. As in fig. 7.

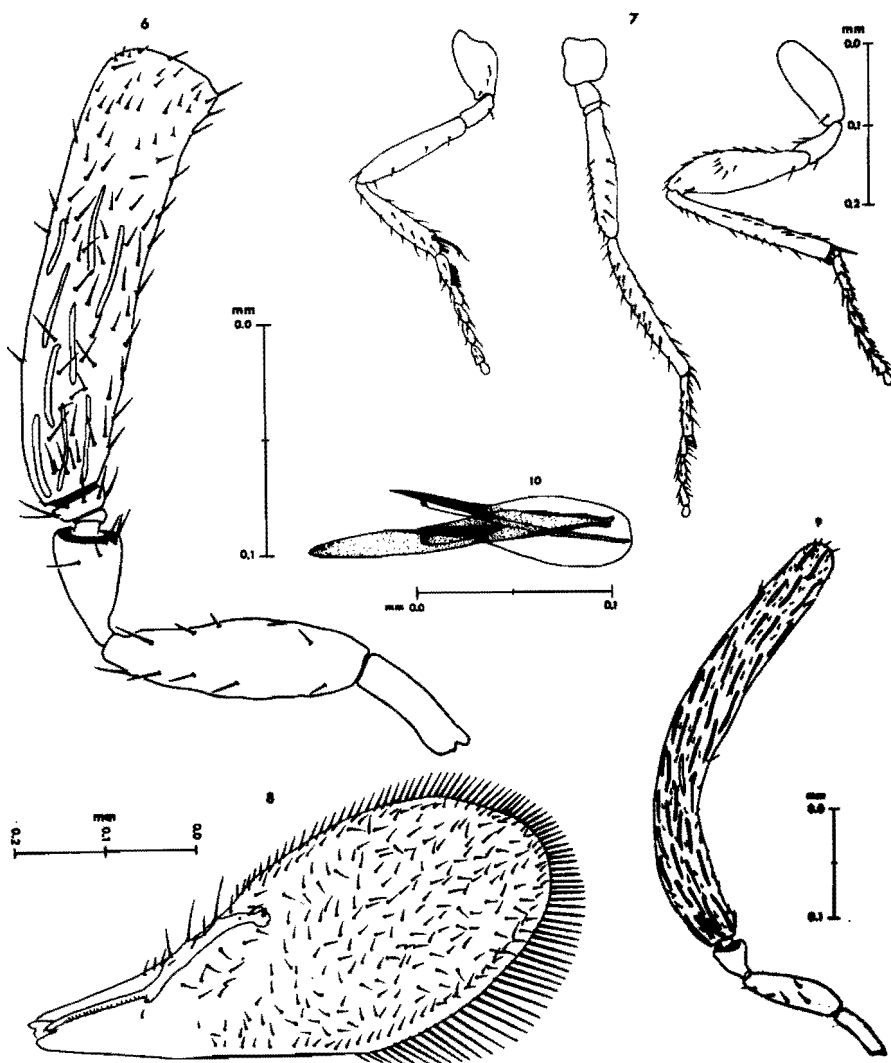
*Wings*. Forewing (fig. 8) about  $2\frac{1}{2}$  times longer than wide, retinaculum  $\frac{3}{4}$  wing length, stigmal subequal to marginal, about half submarginal vein, longest fringe about  $\frac{1}{3}$  width, area posterior to submarginal with one cilium only, bare area posterior marginal with 11 cilia. Hind wing about 7 times as long as wide, fringe nearly of equal width.

*Abdomen*. Base of ovipositor level with posterior coxae, apex of styli extruded from gaster for  $\frac{1}{5}$  of their length; ovipositor antennal ratio: 1.5.

*Measurements in microns*. (Readings given are of type; whenever paratypes show considerable deviations their values are given in parentheses.) Antennal scape 104, pedicel 46, funicle ring 15.8, funicle ring 27.7, club 184 long, 50 wide. Mesoscutum 96 long, 154 wide, scutellum 77 long, 136 wide. Leg I tarsus I 63, II 27, III 39, IV 35;

\* Determined by Dr. L. A. Mound of the British Museum (Natural History).

leg 2 tarsus I 73, II 31, III 29, IV 33; leg 3 tarsus I 63. Forewings (average) length 152, width 61.5, retinacular length 197, widest fringe 23, submarginal vein 44, marginal vein 18, stigmal vein 15. Hindwings (average) length 140, width 13.5, longest fringe 19. Ovipositor 280 (268–313) long.



Figs 6–10. *Eretmocerus nairobii* spec. nov. 6. Antenna (♀). 7. Legs. 8. Forewing. 9. Antenna (♂). 10. Aedeagus.

## MALE

*Colour* darker. Point-mounted, dried specimen dark yellow, posterior margins of prothorax, anterior and posterior margins of mesoscutum and scutellum brown, rest as in female.

*Antenna.* (fig. 9) Club extensive, 9 times width, about 3 times wing length. Rest as in female except for sexual differences.

*Measurements in microns.* Antenna (averages) scape 91, pedicel 31, club 410 long, 45.4 wide; aedeagus (fig. 10) (middle organ) 138.

Described from 4 female and 2 male specimens reared by the author from *Aleurocanthus hansfordi* that infested *Bovyalis caffra* in Nairobi, Kenya during March, 1969. *E. nairobi* material is deposited in the United States National Museum and the British Museum. The holotype is in the Entomological Collection of the Tel-Aviv University.

This species is easily recognizable through its dark coloration on the scutellum and the shape of the antenna; especially the trapezoidal 2nd funicle segment and the truncate ending of the widening club.

*Hosts and distribution.* *Aleurocanthus hansfordi* Corbett on *Bovyalis caffra* Warb., Nairobi, Kenya, 25.iii.1969 and *A. zizyphi* Priesner and Hosni on *Zizyphus spinachristi* (L.), Kafr Zur, Shomron, Palestine, 18.ix.1968.

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